

USSR/Medicine - Virus Diseases

Jan 53

PA 241T9
"Effects of the Environment on the Modification of
Properties of Influenza Virus," V. D. Solov'yev,
S. S. Karenikova, N. R. Gutman, Div of Viruses,
State Control Institute L. A. Tarasevich

"Zhur Mikrobiol, Epidemiol, i Immunobiol" No 1,
pp 12-16

Adaptation of the fresh human influenza strain Em1 to
white mice increases pathogenicity of the strain to
white mice, raises hemagglutinin titers towards
chicken and guinea pig erythrocytes, and increases
the toxicity. The antigenic characteristics, are

241T9

also modified. Adaptation of this strain to allantoic
tissue of chicken embryos increases to some extent
pathogenicity towards chicken embryos, raises markedly
hemagglutinating action with respect to chicken and
guinea pig erythrocytes, and increases to some extent
toxicity as measured by introducing the virus into
the anterior chamber of rabbits' eyes. The antigenic
characteristics remain unchanged and the lack of
pathogenicity towards white mice is retained.

MARENIKOVA, S. S.

241T9

MARENNIKOVA, S. S.

MARENNIKOVA, S. S. -- "Study of the Hereditary Properties of the Influenza Virus and Its Variability Under the Influence of Environmental Conditions." Sub 9 Oct 52, Acad Med Sci USSR. (Dissertation for the Degree of Candidate in Medical Sciences.)

SO: Vechernaya Moskva January - December 1952

BABAYAN, M.Kh., kand. med. nauk; MARENNIKOVA, A.V.

Gas pelvioradiography and its combination with hysterosalpingography. Akush. i gin. 39 no.4:6-9 J1-Ag'63 (MIRA 16:12)

1. Iz kafedry akusherstva i ginekologii (zav. - prof. A.A. Lebedev) pediatricheskogo fakul'teta II Moskovskogo meditsinskogo instituta.

MARENNIKOVA, A.M.

Gas pelvigraphy in differential diagnosis of gynecologic diseases.
Akush. i gin. 40 no.4:106-110 J1-Ag '64. (MIRA 18:4)

1. Kafedra akusherstva i ginekologii (zav. - prof. A.A.Lebedev)
pediatricheskogo fakul'teta II Moskovskogo meditsinskogo instituta
imeni Pirogova.

OTLIVANCHIK, A.N., kand. tekhn. nauk; MARENNIKOVA, A.D., inzh.

Structural boards and products from reed particles in combination
with synthetic binders. Sbor. inform. soob. VNIINSM no.14:15-26
'62. (MIRA 18:3)

ACC NR: AP7004644

of ψ_0 , which can be measured easily since harmonic generation is appreciable only in the immediate vicinity of ψ_0 . The beam generator was a 12 x 120 mm ruby laser, which operated in 500—700- μ sec single pulses. Oscillograms of the SHG are given. Numerical results for field values of 45 and 90 kv/cm are in satisfactory agreement with the theory. The authors suggest that the described effect can be used for making accurate measurements of nonlinear constants of materials and accurate adjustments of the index-matching angle in the case of displacement and parametric amplification of optical frequencies. The authors thank V. N. Ishchenko, N. D. Lizunov, and B. V. Anikeev for their help in carrying out the work. Orig. art. has: 5 figures and 20 formulas. [JM]

SUB CODE: 20/ SUBM DATE: none/ ATD PRESS: 5115

Card 2/2

ACC NR: AP7004644

SOURCE CODE: UR/0288/66/000/003/0118/0124

AUTHOR: Kirin, Yu. M.; Krivoshechekov, G. V.; Marennikov, S. I.; Savvinykh, G. A.

ORG: Institute of Semiconductor Physics, Siberian Department, AN SSSR, Novosibirsk
(Institut fiziki poluprovodnikov Sibirskogo otdeleniya AN SSSR)

TITLE: Influence of the linear electro-optic effect on second-harmonic generation in ADP crystals

SOURCE: AN SSSR. Sibirskoye otdeleniye. Izvestiya. Seriya tekhnicheskikh nauk, no. 3, 1966, 118-124

TOPIC TAGS: ADP crystal, second harmonic, ^{harmonic} generation, nonlinear optics, ~~electro~~ electrooptic effect, *crystal optic property, electric field, laser beam, ruby laser*

ABSTRACT: Theoretical and experimental investigations were made of the variation $\Delta\psi_0$ affecting the phase-matching angle ψ_0 for second harmonic generation (SHG) in an ADP crystal whose optical characteristics are modified by an applied electric field. It was found that only the component E_z of the field along the optical axis has an appreciable effect on the angle ψ_0 . This effect is at its maximum when the plane of the laser beam in the crystal and the optical axis is at 45° to the transverse crystal axes. Then, $\Delta\psi_0 = 54.04 (10^{-6}) E_z$, where E_z is in Kv/cm and $\Delta\psi_0$ is in radians. From this it follows that a field of 100 Kv/cm causes an 18' variation

Card 1/2

UDC: 548.0:535

L 02955-67

ACC NR: AP6032930

only. The intensity of these lines can be explained by a large divergence of the focused beam, which insures that the conditions of synchronism are fulfilled for all frequencies. The experiments show that by employing Raman scattering in various substances with subsequent nonlinear transformation in an ADP-type crystal, a coherent output beam can be obtained at any frequency within the optical range. Orig. art. has: 2 figures and 2 tables.

SUB CODE: 20/ SUBM DATE: 23Feb65/ ORIG REF: 005/ OTH REF: 003/ ATD PRESS: 5099

Card

2/2

L 02955-67 EWT(1)/EEC(k)-2/T/ENP(k) IJP(c) WG

ACC NR: AP6032930

SOURCE CODE: UR/0288/66/000/002/0155/0156

AUTHOR: Krivoshchekov, G. V.; Kirin, Yu. M.; Marennikov, S. I. Savvinykh, G. A.;
Dotsenko, V. I.

ORG: Institute of Semiconductor Physics, Siberian Department AN SSSR, Novosibirsk ⁵⁸
(Institut fiziki poluprovodnikov Sibirskogo otdeleniya AN SSSR) ^B

TITLE: A method of laser frequency conversion ²⁵

SOURCE: AN SSSR. Sibirskoye otdeleniye. Seriya tekhnicheskikh nauk, no. 2, 1966,
155-156

TOPIC TAGS: laser, ruby laser, laser output frequency, laser frequency variation,
laser emission

ABSTRACT: A method is described for converting the output frequency of a laser by using the Raman lines of the beam in benzene and its subsequent mixing in an ADP crystal. The arrangement consists of a Q-switched ruby laser (the output beam of which is passed through a vessel with benzene), the mixing crystal, a filter of aqueous solution of CuSO_4 (for suppression of the main frequency of the laser at $\lambda = 6943 \text{ \AA}$), and a PGS-2 spectrograph with photographic recording. The intensity of Raman lines ($\lambda = 6494, 7459, \text{ and } 8059 \text{ \AA}$) is sufficient to effect a nonlinear interaction of all frequencies within the 2-mm thick mixing crystal. The emissions at 3471 and 3729 $\text{\AA}$ can be considered second harmonics or the results of the mixing of corresponding frequencies, while those at 3596 and 3874 $\text{\AA}$ are the results of mixing

Card 1/2

UDC: 621.378.329

L 44011-66
ACC NR: AP6026717

densities. The effect of electrostriction appears small. The results of the experiment show that in order to determine the power of laser emission it is sufficient to measure the initial amplitude of the crystal oscillations, which is independent of the degree of focusing the laser beam on the surface of a piezocrystal covered with a (0.03 mm) lead foil with a high-reflectivity factor. In conclusion, the authors express their gratitude to V. N. Ishchenko, N. D. Lizunov, and M. L. Baybakov for useful discussions and for assistance in the experiments. Orig. art. has: 2 figures. 2

(26)

SUB CODE: 20/ SUBM DATE: 17Feb66/ OTH REF: 001 ATO PRESS 5070

Card 3/3 LC

L 44011-66

ACC NR: AP6026717

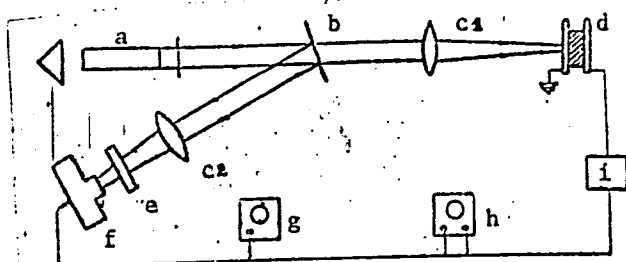


Fig. 1. Diagram of the experimental set-up

passes through the lens (c2) and several filters (e) and falls on the photomultiplier FEU-22 (f), the signal from which then starts the oscillograph (h) (C1-8), recording the emf from the electrodes. The level of laser oscillation was controlled by the oscillograph (g) (C1-4); the signal was amplified by the amplifier. Ultrasonic oscillations were also recorded when ADP, quartz, and PbZrTiO_3 crystals were irradiated with a ruby laser beam. The crystal oscillation amplitude decreased with an increase in laser radiation density at the free crystal surface. This change is possibly associated with increased signal attenuation due to local (at the focus) heating of a crystal or with a decrease in the absorption coefficient at higher laser radiation

Card 2/3

L 44011-66 EWT(1)/EWP(e)/EWT(m)/EWP(t)/ETI/EWP(t) IIP(c) ID/WH
ACC NR: AP6026717 SOURCE CODE: UR/0181/66/008/008/2490/2492

AUTHOR: Bondarenko, A. N.; Kirovoshchekov, G. V.; Marennikov, S. I.; Pestryakov,
Ye. V.; Savvinykh, G. A. 60
57
B

ORG: Institute of Physics of Semiconductors, SO AN SSSR, Novosibirsk (Institut
fiziki poluprovodnikov SO AN SSSR)

TITLE: Excitation of ultrasonic oscillations in crystals under the effect of a
ruby/laser beam

SOURCE: Fizika tverdogo tela, v. 8, no. 8, 1966, 2490-2492

TOPIC TAGS: ruby laser, laser emission, ultrasonic oscillation, KDP crystal,
nonlinear optics

ABSTRACT: The authors describe briefly the conditions for the excitation of ultra-
sonic oscillations in a KH_2PO_4 crystal by the emission of a ruby laser. The crystal
was 15 x 15 x 4.8 mm along the x, y, and z axes, respectively. Several experiments were
performed to clarify the excitation mechanism of these oscillations. A design of the
experimental set-up used is described and shown (Fig. 1). The Q-switched laser beam
(rotating prism) ($\sim 10 \text{ Mw}$), passing through the glass plate (b) and lens (a) with a
focal length $F=210 \text{ mm}$, falls on the crystal (d) fixed on a revolving stand between
two lead foil electrodes. A part of the emission, reflected from the plate (b),

Card 1/3

L 13780-65

ACCESSION NR: AP4045466

emission relative to the crystal axis on the second harmonic output was also obtained. It was determined that $I_{2\omega}$ is maximum when the incident ray is an ordinary ray with a total linear polarization. Orig. art. has: 2 figures and 2 formulas.

ASSOCIATION: Institut radiofiziki i elektroniki Sibirskogo otdeleniya AN SSSR (Novosibirsk Institute of Radiophysics and Electronics, Siberian Branch, AN SSSR)

SUBMITTED: 14Jan64

ATD PRESS: 3132

ENCL: 00

SUB CODE: EC, EM

NO REF SOV: 001

OTHER: 002

Card 2/2

L 13780-65 EWG(j)/EWA(k)/FBD/EWT(l)/EWP(a)/EWT(m)/EEC(k)-2/EEC(t)/T/EEC(b)-2/
EWP(k)/EWA(m)-2/EWA(h) Pn-4/Po-4/Pf-4/Peb/Pi-4/P1-4 IJP(c)/ASD(a)-5/AFETR/
SSD/AFJL/ESD/ASD(d)/RAEM(a)/ESD(gs)/ESD(t) WG/WH
ACCESSION NR: AP4045466 S/0288/64/000/002/0120/0121 60

AUTHOR: Krivoshechekov, G. V.; Kirin, Yu. M.; Marennikov, S. I. 6

TITLE: Investigation of conditions for obtaining the second harmonic
excited by a laser in $\text{NH}_4\text{H}_2\text{PO}_4$ crystal

SOURCE: AN SSSR. Sibirskoye otdeleniye. Izvestiya. Seriya tekhnicheskikh nauk, no. 2, 1964, 120-121

TOPIC TAGS: laser, second harmonic, nonlinear optics, coherence volume, second harmonic generation, ammonium dihydrogen phosphate

ABSTRACT: The dependence of the output intensity of the second harmonic $I_{2\omega}$ inside the matching cone for the indices of refraction of an isotropic dielectric was measured as a function of the angle characterizing variation of the coherence volume inside the matching cone. In the experiments performed, the output of a pulsed ruby laser was focused on a 2--10 mm thick plate of $\text{NH}_4\text{H}_2\text{PO}_4$ crystal. The second harmonic output was measured by a photomultiplier and a spectrograph. The effect of the orientation of the polarization vector of the laser

Card 1/2

AVARSIN, Ya.D.; KOROLEV, A.Ya.; MINDLIN, Ya.I.; BROGALEVA, I.V.; PRIGOREVA,
A.I.; prinimali uchastiye: MARENKOVA, V.P., tekhnik; BEVINA, M.A.,
tekhnik; MARTYNEINA, L.F., inzh.

Effect of chemical treatment of a glass fiber surface on the properties
of fiber glass reinforced plastics. Plast.massy no.7:31-35 '60.
(MIRA 13;10)

(Glass reinforced plastics)

AVIRON, S., kand. tekhn. nauk; MARENKOVA, I. I., starshiy nauchnyy sotrudnik

Wool fabrics from fur waste. Vest. prom. i khud. promys. 2
no. 6:15 Ja '61. (MIRA 14:7)

1. Nauchno-issledovatel'skiy tekhnokhimicheskiy Institut (for
Marenkova).

(Woolen and worsted manufacture)

FONAREV, Naum Mikhaylovich, laureat Gosudarstvennoy premii, kand.
tekhn. nauk; MARINKOVA, G.I., red.

[Automation systems for classification humps] Ustroistva
avtomatiki na sortirovochnykh gorkakh. Moskva, Transport,
1964. 254 p. (MIRA 17:10)

1 rukovoditel' laboratorii avtomatizatsii stantsionnoy ra-
boty Vsesoyuznogo nauchno-issledovatel'skogo instituta zhe-
leznodorozhnogo transporta (for Fonarev).

ZHIL'TSOV, Petr Nikolayevich; MARENKOVA, G.I., red.

[Technical maintenance of electrical interlocking systems;
manual for electricians and technicians of CTC systems]
Tekhnicheskoe sodержanie ustroystv elektricheskoi tsent-
ralizatsii; posobie elektromekhaniku i monteru STsB. Mo-
skva, Transport, 1964. 271 p. (MIRA 17:10)

BUEVNOV, Vitaliy Dmitriyevich; MARENKOVA, G.I., red.

[Electromechanical automatic and remote control systems]
Elektromekhanicheskie ustroistva avtomatiki i telema-
khaniki. Moskva, Transport, 1965. 330 p. (MIRA 18:7)

MURAVIN, Veniamin Moiseyevich; FOLTORAK, Yefim TSalikovich;
MARENKOVA, G.I., red.

[Repair of the apparatus of centralized traffic control
systems] Remont apparatury STsB. Moskva, Transport,
1965. 315 p. (MIRA 18:8)

BELYAZO, van Afanas'yevich; MAREN'KOVA, G.I., red.

[Plug-type centralized traffic control relay apparatus]
Releinaia apparatura STsB shtepsel'nogo tipa. Moskva,
Transport, 1965. 131 p. (MIRA 18:2)

SHMYREV, Aleksandr Georgiyevich; MARENKOVA, G.I., red.

[Automatic signaling on railroad crossings] Avtomaticheskaya signalizatsiya na zheleznodorozhnykh pereezdakh. Moskva, Transport, 1964. 151 p. (MIRA 17:12)

LIST, F.D.; FOMICHEV, Ye.A., inzh., retsenzent; MARENKOVA, G.I.,
inzh., red.; BOBROVA, Ye.N., tekhn. red.

[Remote control of the cutouts of the high-voltage line
of an automatic block system] Teleupravlenie raz"ediniteliami
vysokovol'tnoi linii avtoblokirovki. Moskva, "Transport"
1964. 94 p. (MIRA 17:2)

KAZAKOV, Aleksandr Aristarkhovich; MARENKOVA, G.I., inzh., red.

[Automatic block system, cab signaling, and automatic stop devices] Avtoblokirovka, avtomaticheskaja lokomotivnaia signalizatsiia i avtostopy. 4. perer. i dop. izd. Moskva, Izd-vo "Transport," 1964. 370 p. (MIRA 17:5)

KARETNIKOV, D.S.; BUZO, N.A., inzh., retsenzents; MARENKOVA, G.I.,
inzh., red.; USENKO, L.A., tekhn. red.

[Air-membrane pedal; layout, maintenance, and adjustment]
Vozdushno-membrannaia pedal' ustroistvo, obsluzhivanie i
regulirovka. Moskva, "Transport," 1964. 29 p.
(MIRA 17:3)

MEYERSON, Samuil Iudovich; CHASTOYEDOV, L.A., inzh., retsenzent;
MARENKOVA, G.I., inzh., red.; MEDVEDEVA, M.A., tekhn.red.

[Electrical engineering and power supply sources] Elektro-
tekhnika i istochniki pitaniia ustroistv STsB i sviazi. Izd.2.,
perer. i dop. Moskva, Transzheldorizdat, 1963. 403 p.

(MIRA 16:10)

(Railroads--Signaling--Centralized traffic control)

(Railroads--Communication systems)

PENKIN, N.F.; PIROZHKOV, F.V., inzh., retsenzent; MARENKOVA, G.I.,
inzh., red.; KHITROVA, N.A., tekhn. red.

[Centralized traffic control] Dispetcherskaia tsentrali-
zatsiia. Moskva, Transzheldorizdat, 1963. 359 p.
(MIRA 17:1)

RYAZANTSEV, B.S., kand. tekhn. nauk, red.; POGODIN, A.M., inzh.,
red.; MARENKOVA, G.I., inzh., red.; NOVIKAS, M.N., inzh.,
red.; USENKO, L.A., tekhn. red.

[New devices in automatic control, remote control, and com-
munications] Novye ustroistva avtomatiki, telemekhaniki i
svyazi. Moskva, Transzheldorizdat, 1963. 188 p.

(MIRA 16:7)

(Remote control) (Automatic control)
(Telecommunication)

STEPANOV, N.M.; VASIL'TSOV, A.M.; ZHIGIS, S.Yu., inzh.,
retsenzent; MARENKOVA, G.I., inzh., red.; VOROTNIKOVA,
L.F., tekhn. red.

[RPB and BPLTs semiautomatic block systems] Sistemy pu-
tevoi poluavtomaticheskoi blokirovki RPB i BPLTs. Mo-
skva, Transzheldorizdat, 1963. 182 p. (MIRA 16:10)
(Railroads—Signaling—Block system)

VELTISTOV, P.K.; ZHIL'TSOV, P.N., inzh., retsenzent; ~~MARENKOVA,~~
G.I., inzh., red.; VOROTNIKOVA, L.F., tekhn. red.

[Standard networks of relay interlocking systems of small
stations] Tipovye skhemy rel'einoi tsentralizatsii malykh
stantsii. Moskva, Transzheldorizdat, 1963. 123 p.

(MIRA 16:10)

(Railroads--Signaling--Interlocking systems)

10(6)

AUTHOR:

Marenkova A.F.

SOV/43-58-19-10/16

TITLE:

A Thin Wing in Supersonic Flow Bounded by a Wall
(Tonkoyekrylo v sverkhzvukovom potoke, ogranichenom stenкой)

PERIODICAL:

Vestnik Leningradskogo universiteta, Seriya matematiki,
mekhaniki i astronomii, 1958, Nr 19(4), pp 125 - 138 (USSR)

ABSTRACT:

The author considers the flow around a thin airfoil wing of finite span by a supersonic flow which is bounded by a wall. It is shown that the linearized problem is solvable by application of the method of Krasil'shchikova [Ref 1], combined with the method of images. Airfoil wings of infinite span and plane rectangular airfoil wings are particularly considered. In the last case the lift is graphically represented as a function of the wing width and of the distance from the wall. The theoretical results are in satisfactory agreement with the results of experiments carried out in the wind tunnel of the Gas dynamic Laboratory, Leningrad. There are 6 figures, and 9 references, 5 of which are Soviet, 3 German, and 1 Japanese.

SUBMITTED:

January 18, 1957

Card 1/1

MARENKOVA, A. F.

PA 245T85

USSR/Meteorology - Turbulent Mixing Nov 52

"Structural Methods for Calculating Coefficient of Turbulent Mixing," A. R. Konstantinov and A. F. Marenkova, Candidates of Physicomath Sci, Leningrad State Inst of Hydrology

"Meteorol i Gidrol" No 11, pp 30-33

Discuss the turbulent structure of wind and the accuracy of various methods in calculating the coefficient of turbulent exchange.

245T85

ANDRONOV, Viktor Petrovich; GOLOVIN, Vladimir Andreyevich;
BELYAYEV, I.F., kand. tekhn. nauk, retsenzent;
BAZILEVSKIY, V.M., kand. tekhn. nauk, retsenzent;
MARENKOV, Ye.A., kand. tekhn. nauk, red.

[Production of intermediate products of precious metals
and alloys; a handbook] Proizvodstvo polufabrikatov iz
dragotsennykh metallov i splavov; spravocnoe rukovod-
stvo. Moskva, Metallurgiya, 1965. 403 p.

(MIRA 18:6)

Y 64797-65 ZPT(a)/ZPA(a)-2/ZHA(a)-2 LIF(c)
 ACCESSION NO: AR4004972 S/0275/64/000/011/A054/A053
 621.384.6 16
 SOURCE: Ref. zh. Elektronika i yeye primeneniye. Svydany ton, Abs. 11A352 13
 AUTHOR: Horozov, B. B.; Narezhov, V. M.; Potokhin, Yu. I.; Shishenina, L. A.;
 Filatova, E. N.
 TITLE: Accelerating system of the waveguide-type cyclic accelerator
 CITED SOURCE: Sb. Elektron. uskoriteli. M., Vyssh. shkola, 1964, 138-147
 TOPIC TAGS: accelerator, cyclic accelerator, waveguide type accelerator
 TRANSLATION: Calculation of parameters of an accelerating system of the waveguide-
 type cyclic accelerator is presented; the results of an experimental investigation
 of the system built according to these calculations are described. The experi-
 mental and estimated datae are in good agreement.
 SUB CODE: EC ENCL: 00
 L. L. L.
 Card 1/1

MOROZOV, B.N.; MARENKOV, V.M.; TSIKIN, B.G.; SHISHENINA, L.G.

Uniformly bent periodically septate waveguides for cyclic
electron accelerators. Izv. TPI 122:80-88 '62.

(MIRA 17:9)

ACC NR: AT7004334

down consumption, and accelerate conversion. High sensitivity of the bridge is ensured by its pulse supply; the pulses are taken from a capacitor intermittently connected to a storage battery by a relay. The decoder installed at the ship isolates subcarrier frequencies of 5, 7, 9, 11 kc from received (amplified and detected) radio signals. After a second detection, an AND-gate singles out the starting pulse, and an OR-gate generates clock pulses used for counter operation. A digital-analog converter yields data to a recorder, a punch, and a display unit. Other details are given. Orig. art. has: 3 figures and 8 formulas.

SUB CODE: 09, 17 / SUBM DATE: 14Jul66 / ORIG REF: 002

Card 2/2

ACC NR: AT7004334

SOURCE CODE: UR/0000/66/000/000/0161/0171

AUTHOR: Agizim, A. M. (L'vov); Kirianaki, N. V. (L'vov); Marenkov, V. B. (L'vov)

ORG: none

TITLE: Encoders and decoders in a six-channel radio telemetry system

SOURCE: AN UkrSSR. Metody i sredstva preobrazovaniya informatsii (Methods and means of information conversion). Kiev, Naukova, dumka, 1966, 161-171

TOPIC TAGS: telemetry system, analog digital encoder, digital analog decoder

ABSTRACT: Developed by the L'vov Polytechnic Institute in 1961-62, the radio-telemetry system is intended for simultaneous measurement of temperature (T), salinity (S), and depth (H) at six points of the ocean at a range up to 50 km from the receiver-carrying ship; a depth down to 200 m is measurable. The encoder is based on a bridge circuit with a resistance box in the comparison arm; the lowest resistor in this box is 30 kohms, and the highest, 60 Mohms, which permits neglecting relay-contact resistance and relay-insulation resistance. A binary-decimal code with weights 242^1 and a polarized relay in the measure magazine simplify the circuit, cut

Card 1/2

L 61176-65

ACCESSION NR: AP5020193

also for multicomponent (concrete) and chemical compounds (water, sand, and potassium phosphates). Orig. art. has: 1 table, 3 formulas.

ASSOCIATION: none

SUBMITTED: 25May64

ENCL: 00

SUB CODE: NP, MA

NR REF SOV: 000

OTHER: 002

MA

Card 2/2

Metronome. IUn.tekh. 3 no.3:23 Kr '59. (MIRA 12:4)
(Metronome) (Electronic instruments)

L 61476-65 EWT(m) Feb DIAAP DM

ACCESSION NR: AP5020193

UR/0089/65/018/005/0520/0521

AUTHOR: Marenkov, O. S.; Derzhimanov, R. S.

TITLE: Parabolic approximation of total attenuation coefficients of gamma quanta at 0.03 to 10 Mev energy range

SOURCE: Atomnaya energiya, v. 18, no. 5, 1965, 520-521

TOPIC TAGS: approximation calculation, approximation error, chemical compound, gamma quantum

ABSTRACT: A possible variation of the gamma attenuation coefficient μ as a function of λ (Compton units of the wavelength) at 0.03 to 10 Mev was analyzed. The general relation of $\mu(\lambda)$ is described by the n-power polynomial $\mu(\lambda) = \rho \sum_{k=0}^n c_k \lambda^k$ (where ρ is the matter density, c_k is indefinite coefficient). The parabolic approximation for total attenuation coefficient $\mu/\rho = c_0 + c_1 \lambda + c_2 \lambda^2$ was calculated and the results are tabulated for: Be, C, Na, O, Mg, Al, Si, P, S, Ca, K, Fe, Cu, H₂O, sand, calcium phosphate, and concrete at 0.03 to 0.08, 0.08 to 0.03, 0.03 to 10 Mev. The maximum error of approximation did not exceed 4% at 0.03 to 0.08 Mev, 3% at 0.08 to 0.3 Mev, and 5% at 0.3 to 10 Mev. Thus, it is shown that parabolic approximations μ/ρ can be determined not only for separate elements but

Card 1/2

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S/051/60/008/06/017/024
E201/E691

On the Polarization Phenomena in Electroluminescent Phosphors

R ~ 5 kohms was included in series with the capacitor and the signal across R (~1 mV) was amplified and observed by means of a cathode-ray oscillograph (Fig 2). Modified sources (GIP-1, GIS-2, 26I) were used to supply pulses with rise and decay times of the order of 1 μ sec and amplitudes which could be varied from 0 to 360 V; the duration and the repetition frequency of the pulses could also be varied within wide limits. Electroluminescent flashes (Fig 2) were observed in the region of the green luminescence band (~500 m μ) by means of a photomultiplier FGU-19 and a cathode-ray oscillograph. It was found that the field due to rapid polarization is established in 10-20 μ sec, i.e. during a time interval several orders smaller than the decay time of electroluminescence. Analysis of the kinetics of electroluminescence decay led to a conclusion that quenching is produced by the polarization field acting in the direction opposite to the external field. There are 5 figures and 9 references, 3 of which are Soviet, 5 English and 1 Dutch.

SUBMITTED: October 19, 1959

Card 2/2

80556

S/051/60/008/06/017/024
E201/E691

24.3500

AUTHORS: Bonch-Bruyevich, A.M. and Marenikov, O.S.

TITLE: On the Polarization Phenomena in Electroluminescent Phosphors

PERIODICAL: Optika i spektroskopiya, 1960, Vol 8, Nr 6, pp 855-860 (USSR)

ABSTRACT: Polarization in electroluminescent phosphors governs the magnitude of the field in individual phosphor grains and can be divided into long-duration ("frozen") polarization, which is retained for up to several hundred seconds (Ref 1) and rapid polarization which appears and decays in a much shorter time. This rapid polarization reduces electroluminescence produced by pulses and is responsible for a flash on removal of the external field. The present paper describes a study of the rapid polarization processes and electroluminescent flashes in the ZnS-Cu,Al phosphor excited with pulses. The polarization processes were investigated by observing the form of the current (passing through the circuit which includes the electroluminescent capacitor, cf. Fig 1) on application and removal of an external electric field. One of the capacitor electrodes was transparent and the interelectrode separation was 200 μ . The capacitor was filled with ZnS-Cu,Al in cable oil. A resistance

Card 1/2

MARENKOV, Nikolay Aleksandrovich; DOLGOFOL'SKIY, A.Ya., nauchn.
red.

[Repair of mechanisms without taking the ship out of use]
Remont mekhanizmov bez vyvoda sudna iz ekspluatatsii. Mo-
skva, Transport, 1965. 270 p. (MIRA 18:7)

MARENKOV, Nikolay Aleksandrovich; YUNITSYN, B.A., spets. red.; SANDLER,
N.V., red. izd-va; DROZHZHINA, L.P., tekhn. red.

[Determining defects in main marine engines by inspection for
preventive maintenance] Opredelenie defektov glavnykh sudov-
nykh mekhanizmov pri profilakticheskikh osmotrakh. Leningrad,
Izd-vo "Morskoi transport," 1961. 342 p. (MIRA 15:2)
(Marine engines—Maintenance and repair)

MARENKOV, N.A.

Resolutions of the 21st Congress of the Communist Party in-
spire us to new labor achievements. Transp.stroi. 9 no.2:6-7
F '59. (MIRA 12:5)

(Railroads--Electrification)

MARENKOV, N.A.; DOLGOPOL'SKIY, A.Ya., spets.red.; KUZNETSOV, A.D.,
red.izd-va; DROZHZHINA, L.P., tekhn.red.

[Semidirect-flow marine engines and their servicing] Polu-
priamotochnye sudovye mashiny i ikh obsluzhivanie. Leningrad,
Izd-vo "Morskoi transport," 1958. 98 p. (MIRA 12:8)
(Marine engines)

MARENKOV, N. A.

MARENKOV, N. A.: "Changes in the mechanical properties of boiler steel under the influence of plastic deformations". Leningrad, 1955. Min River Fleet USSR. Leningrad Inst of Water Transport Engineers. (Dissertations for the Degree of Candidate of Technical Sciences)

SO: Knizhnaya letopis', No. 52, 24 December, 1955. Moscow.

MARENKOV, N. A.

Maintenance of Ships' Compound Steam-Boilers (Ukhod vs Kombinirovannymi Sudovymi Parovymi Kotelami). Water Transport Press (VodTransIzdat), Leningrad 1953, 59 pp. Illustr.

Book D 198267, 24 Jan 55

MARENKOV, N.A.; TUMM, I., spetsredaktor; KANEVSKAYA, M., redaktor;
STUDENETSKAYA, V., tekhnicheskij redaktor.

[Care of combined marine steam boilers] Ukhod za kombiniro-
vannymi sudovymi parovymi kottlami. [Leningrad] Gos. izd-vo
vodnogo transporta, 1953. 56 p. (MLRA 7:8)
(Steam boilers, Marine)

YALYMOV, N.; MARENKOV, N.

Where and how to train automobile drivers? Avt.transp. 39 no.12:
52-53 D '61. (MIRA 15:1)

1. Zamestitel' direktora Dushanbinskogo proftekhuchilishcha No.26
(for Yalymov). 2. Starshiy gosavtoinspektor Gosudarstvennoy
avtomobil'noy inspektsii (for Marenkov).
(Automobile drivers)

1. MARENKOV, M. N., FILIMONOV, A. A.
2. USSR (600)
4. Potatoes
7. Storing potato seed stock at the right time. Sad i og. no.10, 1952
9. Monthly List of Russian Accessions, Library of Congress, January 1953, Unclassified.

MARENKOV, M. N.

Potatoes

Reestablish summer potato planting. Sad i og. No. 5, 1952

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MARENKOV, G.M.

Some complications of a vagosympathetic novocaine block on the
neck. Khirurgiia 36 no.7:134-135 Je '60. (MIRA 13:12)
(LOCAL ANESTHESIA)

MARENKOV, G.M. (Moskva, Bol'shevistskiy pereulok, d.11, kv.6)

Clinical aspects of retroperitoneal hemorrhages in closed trauma of
the abdomen. Vest.khir. 83 no.12:37-44 D '59. (MIRA 13:5)

1. Iz 1-y khirurgicheskoy kliniki (zav. - prof. S.V. Lobachev)
Instituta im. N.V. Sklifosovskogo (dir. - zasluzh. vrach USSR
M.M. Tarasov).

(ABDOMEN--WOUNDS AND INJURIES)
(HEMORRHAGE)

LOBACHEV, S.V., PANCHENKO, T.N., MARENKOV, G.M., KALITEYEVKAYA, V.F.

Danger zones of the heart; a preliminary report of an experimental study. [with summary in English] Eksper.khir. 1 no.1:39-47
Ja-F '56 (MIRA 11:10)

1. Iz pervoy khirurgicheskoy kliniki Instituta imeni Sklifosovskogo (zav. klinikoy-doktor meditsinskikh nauk S.V. Lovachev, glavnyy khirurg- prof. B.A. Petrov, direktor instituta - zaslyzhenyy vrach respubliky M.M. Tarasov).

(HEART, wounds and injuries,
exper., determ. of danger zones (Rus))
(WOUNDS AND INJURIES, exper.
hear, determ. of danger zones (Rus))

MAHENKOV, E.A., kandidat tekhnicheskikh nauk; GREBENKIN, D.G., inzhener,
redaktor.

[Assayer's handbook] Spravochnik probirera. Pod red. D.G.Grebenkina.
Moskva, Gosfinizdat, 1953. 230 p. (MLRA 7:1)

(Assaying)

COMMON ELEMENTS										PRECIOUS AND PROPERTIES INDEX									
COMMON ELEMENTS										PRECIOUS AND PROPERTIES INDEX									
2c-38. Influence of Physicochemical Factors on the Loss of Metals of the Platinum Group During Cupellation of Lead. (In Russian.) J. N. Plaksin and E. A. Marenkov. <i>Izvestiya Akademii Nauk SSSR, Otdelenie Tekhnicheskikh Nauk</i> (Bulletin of the Academy of Sciences of the USSR, Section of Technical Sciences), Feb. 1948, p. 209-221.																			
Experiments were performed with and without silver. The effectiveness of the latter in preventing losses of Pt and Pd and its ineffectiveness with regard to Rh and Ir were established. The amount of Pb retained by the Pt group metals after cupellation with Pb in the absence of silver was determined.																			
ASAC-SLA METALLURGICAL LITERATURE CLASSIFICATION										REGIONAL INDEX									
REGIONAL INDEX										REGIONAL INDEX									

MARENKOV, Ye. A., Engineer *Card Sub Sec*

"Loss of Noble Metals in Assaying." Sub 28 Apr 47, Moscow Inst of
Nonferrous Metals and Gold imeni M. I. Kalinin

Dissertations presented for degrees in science and engineering in
Moscow in 1947.

SO: Sum.No. 457, 18 Apr 55

MARENKOV, E. A.

The sampler and evaluator in old-ore concentrating and refining plants---
Moskva, Metallurgizat, 1943. 52 p. (V pomoshch' rabochim razgovorim profsoyuzov)
(49-31761)

TH560.M3

PROCESSES AND REPERITIL INDEX

Chemical methods for combating frothing [in the flotation of Au ores]. I. N. Flaksin and E. A. Marenkov. *Tsvetnaya Metal.* 18, No. 14/15, 50-5 (1941); *Chem. Zentr.* 1943, II, 1042-3.—In the flotation of Au ores by cyanide solns., foaming has been attributed to lubricating oils. These oils formed no foam when added in the amt. of 10 g./cu. m. and formed stable foam only when added in the amt. of 150 g./cu. m. Frothing is caused by resinous substances which originate from wood (used to reinforce the pits), splinters from which contaminate the ore. The foam is stable and coarse; its Au content is the same as that of the ore being dressed. The resin can be removed from the cyanide soln. only by vigorous stirring for 24 hrs. Frothing can be reduced by adding 0.5-2.0 kg. of starch per ton or by increasing the consistency of the material being treated, keeping the free alkali content at 0.002-0.003% of CaO, or by adding 0.8 kg. of MnO or 0.6 kg. of KMnO₄ per cu. m. Partial or complete replacement of CaO by NaOH in the flotation reagent does not change the nature of frothing. Addn. of 40 g. of pine oil per cu. m. resulted in the formation of a considerably more stable foam. W. R. Henna

ASB.SLA - METALLURGICAL LITERATURE CLASSIFICATION

[illegible]

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CA

New method of analyzing cyanide slimes. R. A. Marenkov. *Zolotaya Prom.* 11, No. 7, 30 (1939). Heat a 1-g. sample of cyanide slimes with 50-80 ml. concd. HNO_3 on a sand bath for 15-20 min., dil. with hot water to 150-200 ml., filter, wash the residue with water contg. 1-2 drops of HNO_3 and det. the Ag in the filtrate as AgCl . Heat the residue with 50-60 ml. of aqua regia on a sand bath, evap. with HCl until all HNO_3 is expelled (not to dryness), dil. with hot water to 150-180 ml., filter, heat and ppt. the Au with a hot satd. soln. of hydrazine HCl . B. Z. Kauch

ASAC-SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND ORDERS																										PROCESSING AND PROPERTIES INDEX																									
1ST ORDER													2ND ORDER													PROCESSING													PROPERTIES												
1ST ORDER													2ND ORDER													PROCESSING													PROPERTIES												
Investigation of cyanide sludges. L. A. Marekoy, I. I. Blinder and S. M. Fridman. <i>Sov. Zolotoprom</i> , 1916, No. 3, 47-9; <i>Chem. Zentr.</i> 1917, I, 941. Difficulties in obtaining consistent results in the sampling and analysis of cyanide sludges are discussed. It is especially pointed out that to obtain correct values for Au and Ag in such sludges the loss during heating (evaporation) must be considered. M. G. Moore																																																			
450 51.6 METALLURGICAL LITERATURE CLASSIFICATION																																																			

1ST AND 2ND COLUMNS										3RD AND 4TH COLUMNS									
COMMON ELEMENTS										COMMON ELEMENTS									
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PROCESSES AND PROPERTIES INDEX																			
The use of kerosene in cyaniding carbonaceous (gold) ores. B. A. Mazenkov. <i>Soviet. Zolotoprom</i>, 1956, No. 3-4, 41-2.—The method of Maksin and Zhurlov (C. A. 26, 3759) was tried on a semicom. scale with neg. results. G. I. Makhorsky																			
ASB-55A METALLURGICAL LITERATURE CLASSIFICATION										REGIONAL INDEX									
REGIONAL INDEX										REGIONAL INDEX									

WARENKOV, B.Ya.

Connate pseudomorphous textures of ultrabasic rocks and their
metamorphic products. Trudy IGEM no.17:57-84 '57. (MIRA 11:6)
(Petrology)

SOLOV'YEV, P.I.; ~~MARENKOV~~, A.I.

Over-all mechanization and automatization of the finishing section
of a continuous 300 strip mill. Metallurg 5 no.11:24-28 N '60.

(MIRA 13:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut metalloobrabotki
i mashinostroyeniya i Moskovskoye vyssheye tekhnicheskoye uchilishche
im. Baumana.

(Rolling mills—Equipment and supplies)
(Automatic control)

DAKHNOV, V.N., doktor geol.-miner. nauk; KHOLIN, A.I., kand. geol.-
miner.nauk; PESTRIKOV, A.S.; GALUZO, Yu.V.; AFRIKYAN, AN.;
YUDKEVICH, R.V.; POPOV, V.K.; POZIN, L.Z.; LARIONOV, V.V.;
VENDEL'SHTEYN, B.Yu.; GORBUNOVA, V.I.; DZYURAK, M.D.; YEVDOKIMOVA,
V.A.; ZHOKHOVA, R.G.; LATYSHEVA, M.G.; MAREN'KO, N.N.; MANCHEVA,
N.V.; MOROZOVICH, Ya.R.; OREKHOVSKAYA, Ye.P.; POKLONOV, M.S.;
ROMANOVA, T.F.; SEVOST'YANOV, M.M.; TANASEVICH, N.I.; FARMANOVA,
N.V.; FEDOROVICH, G.P.; SHCHERBININ, V.A.; ELLANSKIY, M.M.;
YANUSH, Ye.F.; YUNGANS, S.M., ved. red.; YAKOVLEVA, Z.I., tekhn.
red.

[Using methods of field geophysics in studying gas-bearing re-
servoirs]Primenenie metodov promyslovoi geofiziki pri izuchenii ga-
zonosnykh kollektorov. Moskva, Gostoptekhizdat, 1962. 279 p.
(MIRA 16:2)

(Gas, Natural--Geology)
(Prospecting--Geophysical methods)

MADE UFG, F.S.

Excerpta Medica 1/5 sec 17 May 55 Pub. Health, Social Medicine & etc.

2075. MARENKO F.S. * Preventive measures against traumatism
in agriculture at the MT.S at Privolnyank SOVETSK.MED.
1954, 9 (29-30) Tables 1 (Russian text)

MARENKO, A.

Subject : USSR/Aeronautics AID P - 305
Card : 1/1
Author : Marenko, A., Maj. Engineer
Title : Determination of defects in an aircraft
Periodical : Vest. Vozd. Flota, 7, 57-59, J1 1954
Abstract : The author describes the actual proceedings of defect detection in one of the Soviet Air Force units and analyses it. He stresses the necessity of finding and removing the cause of defects.
Institution : None
Submitted : No date

MARENKIN, F.S., kand.sel'skokhoz.nauk

Mixed sowing of corn and phaseolus for forage purposes.
Zhivotnovodstvo 24 no.9:48-49 S '62.

(MIRA 15:12)

(Corn as feed)

(Beans as feed)

MARENKIN, F.S., kand. sel'skokhozyaystvennykh nauk

Forage cabbage raised as a postharvest crop. Zhivotnovodstvo 20
no. 7:33-34 J1 '58. (MIRA 11:8)

(Cabbage)
(Forage plants)

MARENKIN, F.S., agronom.

Year-round sewage irrigation of fields. Zemledelie 4 no.10:110-112
0 '56. (MLRA 9:11)

(Moscow Province--Sewage irrigation)

MARENKIN, P. S. Cand Agr Sci -- (diss) "The effect of irrigation of fields
by ^{drainage} waste waters upon the growth and yield of succulent fodder crops in ^{the} light
podzol soils of ~~the~~ Moskovskaya Oblast." Mos, 1956. 19 pp (All-Union Sci Res
Inst of Fodder im V. R. ^V ~~Mil'yams~~), 110 copies (KL, 44-57, 100)

21

BJR

14034* The Year-Around Use of Raw Sewage Water for
Irrigating Farm Crops. (Russian.) F. S. Marenkin. *Sovetskaya*
Agronomika, v. 10, June 1952, p. 56-59.
Experiments carried on for 2 yrs. on the above are described.
Very satisfactory results were obtained.

MARENKIN, F. S.

Sewage Irrigation

Using sewage water for irrigation throughout the year. Sad i og., no. 7, 1952.

9. Monthly List of Russian Accessions, Library of Congress, _____ 1953. Unclassified.

USSR/Geophysics - Sewage Water Utilization Jun 51

"Experience in Using Sewage Waters for Irrigation in the Course of the Whole Year Round," F. S. Marenkin, Agronomist, A. I. Ponomareva, Engr-Con-servationist

"Gidrotekh i Meliorat" No 6, pp 61-65

Experience of number of regions in Moscow Oblast and data of sci res institutions show yield on lands irrigated with sewage water is 2-3 times higher than that of nonirrigated lands. Irriga-tion with sewage waters in kolkhozes was first begun in Ukhomsk Rayon, Moscow Oblast, in 1935;

186T36

USSR/Geophysics - Sewage Water Utilization Jun 51
(Contd)

now it is successfully employed in many others. Concludes sewage water decreases acidity of soils and can be used in most cases with discard.

186T36

MARENKIN, F. S.

LAPIN, Boris Nikolayevich; LUCHITSKIY, I.V., otv. red.;
MARENINA, T.Yu., red.

[Atlas of the structures of Devonian volcanic rocks in
the Gornyy Altai] Atlas struktur devonskikh vulkano-
gennykh porod Gornogo Altaia. Moskva, Nauka, 1965. 125 p.
(MIRA 18:11)

MARENINA, T.Yu.; SIRIN, A.N.; TIMERBAYEVA, K.M.

Koryak volcano of Kamchatka. Trudy Lab.vulk. no.22:67-130 '62.
(MIRA 16:1)

(Koryak Volcano)

MARENINA, T.Yu.

Ichinskiy volcano in the central range of Kamchatka. Trudy Lab.
vulk. no.22:3-66 '62. (MIRA 16:1)
(Ichinskiy Volcano)

MARENINA, T.Yu.

Welded tuffs of the Ichinskiy Volcano in the Central Range of
Kamchatka. Trudy Lab. vulk. no.20:108-116 '61. (MIRA 14:11)

1. Laboratoriya vulkanologii AN SSSR.
(Ichinskiy volcano--Volcanic ash, tuff, etc.)

MARENINA, T. Yu.

The Opala Volcano in Kamachatka. Trudy Lab. vulk no.18:43-56 '60.
(MIRA 14:3)

(Opala Volcano)

MARENINA, T.Yu.

Khanger Volcano in the Sredinnyy Range of Kanchatka. Trudy Lab.
vulk. no.17:3-63 '59. (MIRA 13:5)
(Khanger Volcano)

MARENINA, T.Yu.

~~Dzenzur volcano. Biul. Vulk. sta. no.26:86-100 '57.(MIRA 11:5)~~
(Dzenzur volcano)

MARENINA, T.Yu.

Geological and petrological study of Mutnaya Sopka. Trudy Lab.
vulk. no.12:3-52 '56. (MLRA 9:12)
(Mutnaya Sopka)

MARENINA, K.N.; MIKHAYLOV, I.G.

Use of ultrasound in studying crystallization processes in dyes.
Vest. LGU 18 no.10:52-65 '63. (MIRA 16:8)
(Ultrasonic waves--Industrial applications) (Crystallization)

BOGUSLAVSKIY, M.G.; MARENINA, K.N.; FEOFANOV, G.N.

Ultrasonic apparatus for controlling pulp concentration.

Bum. prom. 33 no.12:10-13 D '58.

(MIRA 11:12)

(Ultrasonic waves--Industrial applications)

MARENINA, K. N.
MIKHAYLOV, I. G., MARENINA, K. N.

"Sound Absorption in Suspensions."

paper presented at the 4th All-Union Conf. on Acoustics, Moscow, 26 May - 2 Jun 58.

1949 ENINA, K N

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Absorption of ultrasonic waves in suspensions. I. G. Kuznetsov and K. N. Barenina. *Vestnik Leningrad. Univ.* 11, No. 22, Ser. Fiz. i Khim., No. 4, 66-74 (1966).
The relaxation times during absorption of ultrasound by aq. suspensions of BaSO_4 , Al_2O_3 , quartz sand, kaolin, Hg (the size of particles was 7, 6, 3.5, 0.45, and 0.18 μ , resp.) were 2×10^{-4} , 1×10^{-4} , 5×10^{-4} , 5×10^{-4} , and 3×10^{-4} sec., resp. The results agreed with the absorption theory (cf. Rytov, et al., *Sov. Phys. Usp.* 33, 4847; Urick, *J. Acoust. Soc. Am.* 20, No. 2, 225 (1948)). The absorption coeff. related to the mass of particles in the liquid (α_m) was directly related to their concn. The absorption coeff. with reference to the friction of particles (α_f) was related to the size of particles: it increased proportionally to the square of the radius of particles until it reached a max. and then it decreased proportionally to $1/r$. The absorption coeff. (α_s), related to the scattering of ultrasonic waves by particles, increased either with the size of particles or with increase in the frequency (ν) of the field ($\alpha_s \sim \nu^4$). α_m was proportional to the frequency in the following manner: at 4-5.54 Mc. α_m was proportional to ν^2 , at 5.54-5.58 Mc. $\alpha_m \sim \nu^3$, and at 5.58-17.82 Mc. $\alpha_m \sim \nu^4$. A. B. Kalloby

R/M MT

MARENINA, A.I.

Dynamics of electrical potentials of the human cerebral cortex
during hypnosis with different types of rapport. Zhur.vys.
nerv. deiat. 11 no.2:233-236 Mr-Ap '61. (MIRA 14:6)

1. Laboratoriy fiziologii i patologii vysshey nervnoy deyatel'nosti
Instituta fiziologii imeni I.P.Pavlova AN SSSR.
(HYPNOTISM) (ELECTROENCEPHALOGRAPHY)

MARENINA, A.I.

Electrophysiological study of conditioned and unconditioned
reflexes during different phases of hypnosis in man. Trudy Inst.
fiziol. 8:77-80 '59. (MIRA 13:5)

1. Laboratoriya fiziologii i patologii vysshey nervnoy deyatel'-
nosti (zaveduyushchiy - F.P. Mayorov) Instituta fiziologii im.
I.P. Pavlova AN SSSR.
(REFLEXES) (HYPNOSIS)

KARAPETYAN, Ye.A.; MARENINA, A.I.

Effect of stimulation by light on brain potentials in narcoleptic patients. Trudy Inst. fiziol. 7:135-139 '58. (MIRA 12:3)

1. Laboratoriya fiziologii i patologii vysshey nervnoy deyatel'-nosti (rav. - F.P. Mayorov) i Sektor nevrozov i organicheskikh zabolevaniy nervnoy sistemy (rav. - N.A. Kryshova) Instituta fiziologii im. I.P. Pavlova AN SSSR.

(SLEEP--DISORDERS) (ELECTROENCEPHALOGRAPHY)

(LIGHT--PHYSIOLOGICAL EFFECT)

MARENINA, A. I., Doc Med Sci -- (diss) "Electrophysiological study of
normal and hypnotic sleep in *man*," *Len*, 1958. 2 31 pp with illa.
(Acad Sci USSR, Inst of Physiology im I. P. Pavlov), 100 copies (KL,
18-58, 102)

MARENINA, A.I.

Effect of disinhibitory stimuli on brain potentials at various stages of hypnosis. Trudy Inst. fiziol. 6:330-334 '57. (MIRA 11:4)

1. Laboratoriya fiziologii i patologii vysshey nervnoy deyatel'nosti (zaveduyushchiy F.P. Mayorov).
(HYPNOSIS) (ELECTROENCEPHALOGRAPHY)

KARAPETYAN, Ye.A.; MARENINA, A.I.

Changes in the brain potentials during bismuth and sleep treatment
of narcolepsy and other forms of diseases with sleep disturbances.
Trudy Inst.fiziol. 5:391-395 '56. (MLPA 10:1)

1. Klinika organicheskikh zabolevaniy, zaveduyushchiy - N.A.Kryshova,
i Laboratoriya fiziologii i patologii vysshey nervnoy deyatel'nosti
Zaveduyushchiy - F.P.Mayorov.
(SLEEP) (ELECTROENCEPHALOGRAPHY)
(BISMUTH--THERAPEUTIC USE)

EXCERPTA MEDICA Sec.2 Vol.10/8 Phy.Biochem. Aug 57

3491. MARENINA A.I. Lab. for Physiol. and Pathol. of Higher Nervous Activity, Leningrad. *Cerebral potential changes in various phases of hypnosis in a man (Russian text) TRUDY INST. FIZIOL. I. P. PAVLOVA AKAD. NAUK 1956, 5 (299-306) Graphs 6

After closing the eyes a certain stimulation of the brain was noted; there was an increase in amplitude of all waves (an unipolar lead from optic zone was used). Simultaneously alpha-waves appeared in many subjects (53 persons were examined). In the first phase of hypnosis (dosing state) electrical activity of the brain was even more increased. Alpha-waves usually became more regular and beta-waves often increased in amplitude. In the second phase of hypnosis there was a certain decrease in electrical brain activity. Alpha-waves either became more rhythmical and regular or they decreased in amplitude. Beta-waves also decreased in amplitude or partly disappeared. In the third (somnambolic) hypnosis phase all wave amplitudes decreased. Only beta-waves of low amplitude were observed. Brain potentials were similar to those registered in a quiet alert state but the electrical activity was often decreased. EEG did not show characteristics of a natural deep sleep.

References 8.

Pronin - Moscow

MARENINA, A.I.

Further investigations on the dynamics of cerebral potentials
in various phases of hypnosis in man. Fiziol. zhur. 41 no.6:
742-747 N-D '55. (MLA 9:3)

1. Laboratoriya fiziologii i patologii vysshey nervnoy deyatel'
nosti Instituta fiziologii im. I.P. Pavlova AM SSSR, Leningrad.
(HYPNOSIS, physiology,
EEG)
(ELECTROENCEPHALOGRAPHY,
in hypnosis)

MAYOROV, F.P.; MARENINA, A.I.

Treatment of causalgia by paravertebral diathermy. Zhur.nevr.i psikh. 53
no.6:465-466 Je '53. (MLBA 6:6)

1. Institut fiziologii imeni I.P.Pavlova Akademii nauk SSSR. (Causalgia)

MARENIHA, A.I.

Studies on sleep in narcolepsy with electroencephalography. Zh.
vysshei nerv. deiat. 2 no. 2:219-223 Mar-Apr 1952. (GLML 23:3)

1. Laboratory of the Physiology and Pathology of Higher Nervous
Activity of the Institute of Physiology imeni I. P. Pavlov of the
Academy of Sciences USSR.

MARENINA, A.I.; MAYOROV, F.P., zaveduyushchiy.

Investigation of the somnambulant phase of hypnosis by the electroencephalographic method. Trudy Inst.fiziol. 1:333-338 '52. (MLHA 6:8)

1. Laboratoriya fiziologii i patologii vysshey nervnoy deyatel'nosti.
(Hypnosis) (Electroencephalography)

MARENINA, A.I.; MAYOROV, F.P., zaveduyushchiy.

Electroencephalographic study of natural and hypnotic sleep in man. Trudy
Inst.fiziol. 1:325-332 '52. (ML8A 6:8)

1. Laboratoriya fiziologii i patologii vrashey nervnoy deyatel'nosti.
(Sleep)

MARENINA, A.I.; MAYOROV, F.P., zaveduyushchiy.

Investigating the dynamics of sleep by measuring skin potentials. Trudy
Inst.fiziol. 1:320-324 '52. (MLA 5:3)

1. Laboratoriya fiziologii i patologii vyshey nervnoy deyatel'nosti.
(Sleep) (Skin)